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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,418	12/03/2003	John I. Garney	ITL1047US (P17449)	5582
21906 7590 12/29/2006 TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			EXAMINER SCHLIE, PAUL W	
			ART UNIT	PAPER NUMBER
			2186	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/29/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/726,418	Applicant(s) GARNEY, JOHN I.	
	Examiner Paul W. Schlie	Art Unit 2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-33 have been examined as previously presented.

Response to Arguments

2. Applicant's response filed 12/11/06 with respect to the request to verify the correctness of the inventorship of this application has been noted.

Applicant's arguments regarding the rejection of the claims 1-33 under 35 U.S.C. 112 have been fully considered but are not persuasive; as the claims continue to be considered to not clearly and distinctly point out subject matter comprising essential steps and/or cooperative relationships between claimed elements; such as the steps or elements relied upon (see pages 5-7) by the applicant to enable writing cache lines to disk, or facilitate the monitoring of disk write requests, absent an operative (loaded) disk driver as seemingly implied from the claims and arguments as presented; and thereby their rejection is maintained.

3. Applicant's arguments regarding the rejection of claims 1-33 as being unpatentable over Parry under 35 U.S.C 103 have been fully considered but are not persuasive; as the reference does teach writing cache line to a disk drive prior to a disk drive re-loading as would occur during a "re-boot" of a system, as defined by the applicant as being equivalent to system "boot" or "start-up" or "system boot" (see page 5 lines 12-14) being the time at which a disk driver would normally load and subsequently available to enable the system to communicate with the disk drive absent any other claimed means to do so; thereby the claims can only be consistently interpreted as writing the dirty cache

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line to a disk and monitoring for a disk driver request after a disk driver had been loaded and prior to it re-loading upon a "re-boot"; as any other interpretation would necessitate further details be recited in the claims to provide the missing logical and/or structural relationships considered to be essential the applicant's claimed invention.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-33 are provisionally rejected on the ground of nonstatutory double patenting over copending Application No. 10/607,772. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, whereby effectively both claim trapping and logging write transactions from a first disk driver prior to and not cognizant of the loading or presence of a second disk driver maintaining its own cache for the same drive, such that the cache may be made coherent with the state of disk drive after accounting for previously logged write transactions, although claimed in different form.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

7. Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps and/or structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Specifically, as claimed, it is not clear what the inventive relationship is between the claimed elements comprising: cache lines, disk writes (in absents of a loaded driver), disk driver, disk drive, monitoring, second memory and filter function nor implicit

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recipient of its acknowledgement are; nor is it clear what is meant by (i.e. in what circumstance are) disk-writes (to be monitored) expected to occur prior to a disk driver loading.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-33 are rejected under 35 U.S.C. 103(a) as obvious over Parry (US Patent 5,574,920).

As per independent claims 1, 13, 20 and 27, Parry teaches a system and corresponding methods comprising: writing dirty cache lines (i.e. "uncommitted data") managed by a disk driver to a disk drive prior to it re-loading (and being previously shutdown); and monitoring for disk-write requests as may occur prior to said driver loading by a filter function (i.e. an installed I/O handler via "Install_I/O_Handler") being code stored in memory being distinct from that of the normal BIOS code which is considered acknowledged as being installed implicitly in absents of indication of error otherwise (see abstract, column 8 lines 43-64, and figures 1 and 2).

As per claims 2-12, 14-19, 21-26 and 28-33 being dependent on claim 1, 13, 20, 27, or correspondingly dependent claim inclusively; as all the claims are considered to merely cite that considered implicit in that taught by Parry as

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reviewed above in other form, or represent obvious variations thereof; the claims are correspondingly rejected.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul W. Schlie whose telephone number is 571-272-6765. The examiner can normally be reached on Mon-Thu 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 517-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PIERRE BATAILLE
PRIMARY EXAMINER
12/20/06